Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (previously presented) A method for the lowering of serum cholesterol levels in a mammal comprising the steps of

making a genetic construct comprising (1) a protein coding sequence encoding for the expression of a fusion protein, the fusion protein including (a) a truncated form of a low density lipoprotein receptor which includes the domain providing the function of binding to low density lipoprotein but does not include the domain of the native protein associated with membrane binding or the domain associated with O-linked sugars, and (b) a localization domain which directs localization of the fusion protein to the interior of a cell in the mammal so that the fusion protein will become localized to the endoplasmic reticulum, and (2) a promoter effective in the cells of the mammal to express the protein coding sequence; and

delivering the genetic construct into the vein of the mammal such that the expression and production of the fusion protein in the mammal results in the lowering of serum cholesterol in the mammal.

2. (Original) A method as claimed in claim 1 wherein the low density lipoprotein receptor is LDLR354.

3. (Original) A method as claimed in claim 1 wherein the localization domain is selected from the group consisting of the amino acid sequences KDEL, KEEL, HDEL, DDEL, QDEL, ADEL and SDEL.

4. (Original) A method as claimed in claim 1 wherein the localization domain is KDEL.

5. (previously presented) A method for the lowering of plasma triglyceride levels in a mammal comprising the steps of

making a genetic construct comprising (1) a protein coding sequence encoding for the expression of a fusion protein, the fusion protein including (a) a truncated form of a low density lipoprotein receptor which includes the domain providing the function of binding to low density lipoprotein but does not include the domain of the native protein associated with membrane binding or the domain associated with O-linked sugars, and (b) a localization domain which directs localization of the fusion protein to the interior of a cell in the mammal so that the fusion protein will become localized to the endoplasmic reticulum, and (2) a promoter effective in the cells of the mammal to express the protein coding sequence; and

delivering the genetic construct into the cells of the mammal, by delivery the genetic construction in to a vein of the mammal, such that the expression and production of the fusion protein in the mammal results in the lowering of plasma triglycerides in the mammal.

6. (Original) A method as claimed in claim 5 wherein the low density lipoprotein receptor is LDLR354.

7. (Original) A method as claimed in claim 5 wherein the localization domain is selected from the group consisting of the amino acid sequences KDEL, KEEL, HDEL, DDEL, QDEL, ADEL and SDEL.

8. (Original) A method as claimed in claim 5 wherein the localization domain is KDEL.

9. (previously presented) A DNA construct comprising a promoter operably linked to a protein coding sequence, the protein coding sequence coding for the expression of a fusion protein comprising (a) truncated form of a low density lipoprotein receptor which includes the domain providing the function of binding to low density lipoprotein but does not include the domain of the native protein associated with membrane binding or the domain associated with O-linked sugars, and a localization domain signaling for the transport of the fusion protein to the endoplasmic reticulum of a cell, such that the construct is effective, when delivered into the vein of a mammal, to lower serum cholesterol in the mammal.

10. (Original) A DNA construct as claimed in claim 9 wherein the low density lipoprotein receptor is LDLR354.

11. (Original) A DNA construct as claimed in claim 9 wherein the localization domain is selected from the group consisting of the amino acid sequences KDEL, KEEL, HDEL, DDEL, QDEL, ADEL and SDEL.

12. (Original) A DNA construct as claimed in claim 9 wherein the localization domain is KDEL.

13. (Withdrawn) An artificially constructed fusion protein comprising
a receptor for low density lipoprotein; and
a localization domain signaling for retention of the fusion protein in the interior of a cell.

14. (Withdrawn) An artificially constructed fusion protein as claimed in claim 13 wherein the low density lipoprotein receptor is LDLR354.

15. (Withdrawn) An artificially constructed fusion protein as claimed in claim 13 wherein the localization domain is selected from the group consisting of the amino acid sequences KDEL, KEEL, HDEL, DDEL, QDEL, ADEL and SDEL.

16. (Withdrawn) An artificially constructed fusion protein as claimed in claim 13 wherein the localization domain is KDEL.

17. (previously presented) A DNA construct comprising a promoter operably linked to a protein coding sequence, the protein coding sequence coding for the expression of a fusion protein which includes the first 354 amino acids of the low density lipoprotein receptor fused to the amino acid sequence KDEL, such that the construct is effective, when delivered into the vein of a mammal, to lower serum cholesterol in the mammal.